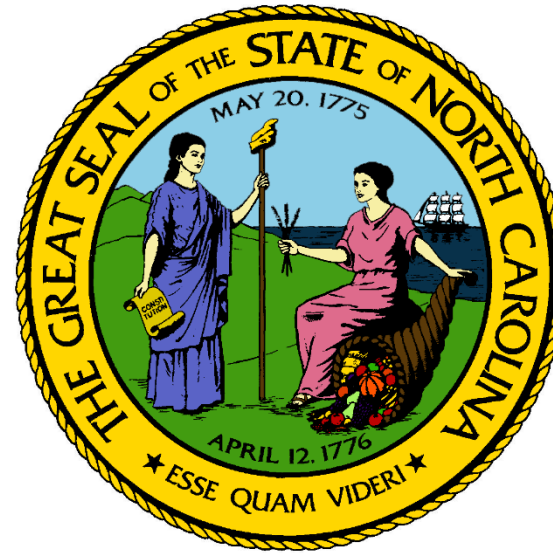


North Carolina Autonomous Vehicle Legislation

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House Select Committee on Strategic Transportation Planning and Long Term Funding Solutions

December 4, 2017 @ 1:00 P.M.

Legislative Office Building 544

State & Federal Autonomous Vehicle (AV) Legislation

- ▶ 21 states have enacted legislation related to Autonomous Vehicles since 2012.¹
- ▶ Recent Federal Legislation
 - ▶ SELF DRIVE Act ([H.R. 3388](#))² - Passed through the U.S. House of Representatives and is currently in the U.S. Senate Committee on Commerce, Science, and Transportation.
 - ▶ Federal role would include regulating design and manufacturing to ensure the safety of highly autonomous vehicles
 - ▶ Fed Law/Reg. would preempt: state law or regulation related to the “. . . design, construction, or performance of highly automated vehicles, automated driving systems, or components of automated driving systems.”
 - ▶ States’ roles would include, but are not limited to, licensing, registration, insurance, and law enforcement
 - ▶ UNLESS: it would pose an “unreasonable restriction” to the design, construction, etc.

North Carolina & Drivers

THE PAST - Always a *driver/operator* in the motor vehicle.

- “Operator. - A person in actual physical control of a vehicle which is in motion or which has the engine running. The terms "operator" and "driver" and their cognates are synonymous.” G.S. 20-4.01(25).

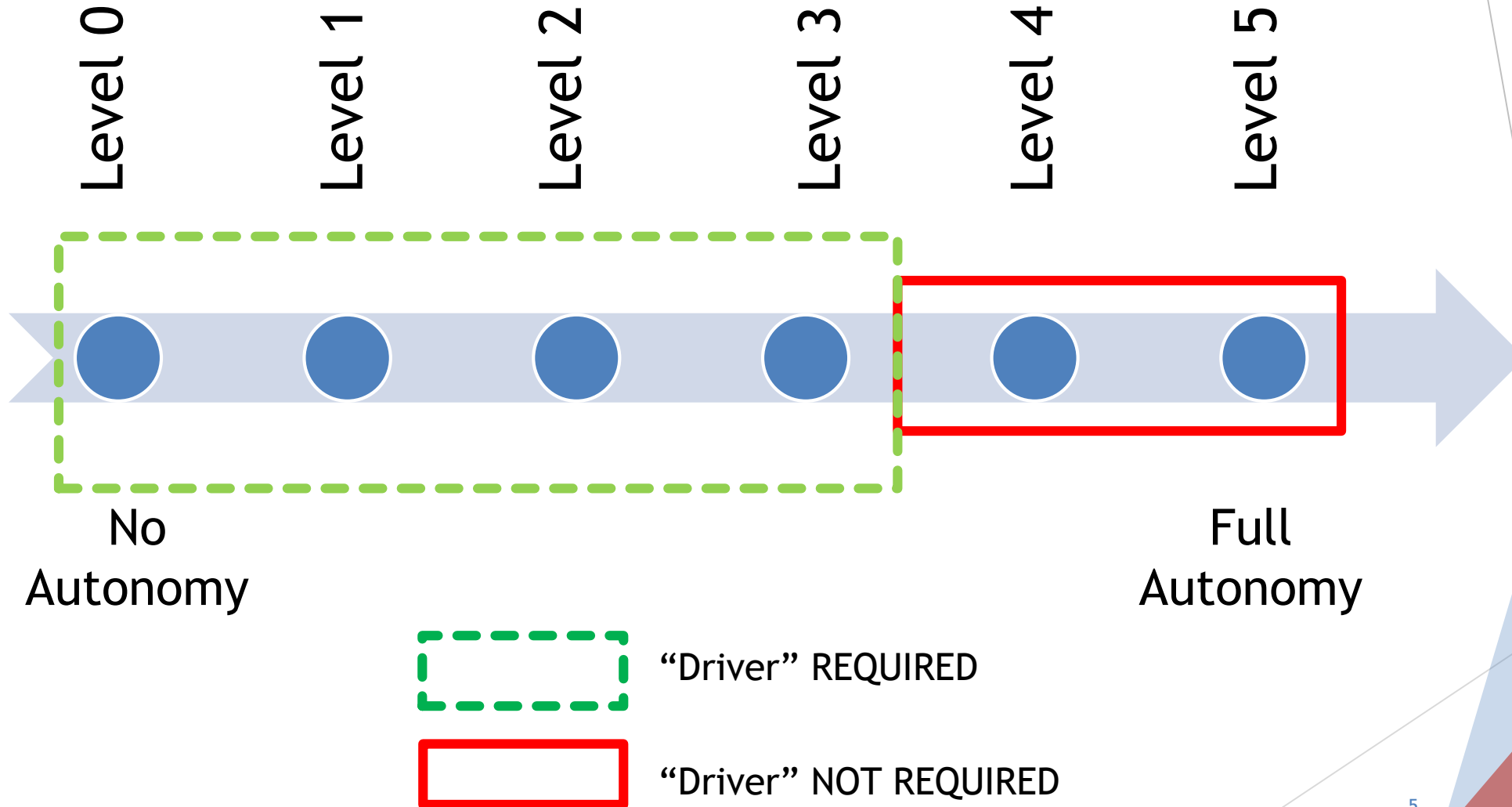
THE FUTURE - Not always a *driver*.

- “Operator. - For the purposes of this Article, is a person as defined in G.S. 20-4.01. An operator does not include an occupant within a fully autonomous vehicle performing solely strategic driving functions.” G.S. 20-400(5).

Common AV Terminology

- SAE International Inc. is a global association of engineers and experts in the automotive and aerospace industries.
 - “Levels” of autonomy are currently based on SAE’s published recommended practice J-3016. This document also defines many of the terms used commonly when referring to AVs.
- National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation
 - Automated Driving Systems 2.0: A Vision for Safety (Policy/Guidelines) (2017)
- Automated Driving System (ADS) = The brains & muscles: tactical decisions, motions, coordination, judgment.
- Dynamic Driving Task (DDT) = What we currently think of as *driving* a vehicle.
- Operational Design Domain = Conditions under which a system or component is designed to function.

SAE Levels (Simplified)



GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2017

SESSION LAW 2017-166
HOUSE BILL 469

AN ACT TO REGULATE THE OPERATION OF FULLY AUTONOMOUS MOTOR
VEHICLES ON THE PUBLIC HIGHWAYS OF THIS STATE.

S.L. 2017-166 (H469)

- Defines key terms applicable to autonomous vehicles.
- Prohibits local government from creating motor vehicle regulations other than what is currently authorized by statute.
- Creates:
 - Article 18 in Chapter 20
 - Fully Autonomous Vehicle Committee

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2017

SESSION LAW 2017-169
HOUSE BILL 716

AN ACT TO PROVIDE THAT THE LAWS REGULATING THE DISTANCE BETWEEN MOTOR VEHICLES TRAVELING ON THE ROAD DO NOT APPLY TO ANY NON-LEADING COMMERCIAL MOTOR VEHICLE TRAVELING WITHIN A PLATOON WHERE AUTHORIZED BY THE DEPARTMENT OF TRANSPORTATION.

S.L. 2017-169 (H716)

- Changes the existing “Following Too Closely” Laws
- i.e. does not apply to drivers in non-leading Commercial Motor Vehicles with an electronically interconnected braking system.

Driving Forward

- ▶ North Carolina S.L. 2017-166 (H469) DOES NOT address all laws which are directly or tangentially related to motor vehicle operation (e.g. insurance, torts, etc.).
- ▶ Further legislative efforts will likely be required as AVs are developed, tested, and are deployed within North Carolina - short-term and long-term.
 - ▶ NC Fully Autonomous Vehicle Committee “shall meet . . . to consider matters relevant to fully autonomous vehicle technology . . . and make recommendations to the General Assembly on any needed changes to State law.

Endnotes

1. <http://www.ncsl.org/research/transportation/autonomous-vehicles-self-driving-vehicles-enacted-legislation.aspx>
2. <https://www.congress.gov/bill/115th-congress/house-bill/3388?q=%7B%22search%22%3A%5B%22self+drive+act%22%5D%7D>
3. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/13069a-ads2.0_090617_v9a_tag.pdf